

# SolarMax P-Series

Single-phase • 2 kW to 5 kW

The power package for residential solar plants



- Maximum yield
- Individual tracker concept
- Safe and convenient connection area
- Direct connection to the Internet
- Highest efficiency in its class

# SolarMax P-Series

## Specifications

		2000P	3000P	4000P	4600P	5000P
<b>Input values</b>	MPP-voltage range <sup>1)</sup>	210 V ... 480 V	310 V ... 480 V	210 V ... 480 V	240 V ... 480 V	260 V ... 480 V
	Control range	120 V ... 580 V				
	Minimum DC-voltage	120 V				
	Maximum DC-voltage	600 V				
	Maximum DC-current	10 A		10 A + 10 A		
	Number of MPP-Trackers	1		2		
	Number of string connections	1		2		
Connection type	Wieland PST40i1 (identical to MC4)					
<b>Output values</b>	Rated output power <sup>2)</sup>	2,000 W	3,000 W	4,000 W	4,600 W	5,000 W
	Maximum apparent output power <sup>2)</sup>	2,000 VA	3,000 VA	4,000 VA	4,600 VA	5,000 VA
	Maximum AC current	9 A	13.5 A	17.5 A	22 A	
	Nominal mains voltage	230 V / 184 V ... 276 V				
	Mains nominal frequency / range	50 Hz / 45 Hz ... 55 Hz				
	Power factor cos (φ)	Adjustable from 0.8 overexcited to 0.8 underexcited				
	Distortion factor at rated output power	< 3 %				
	Connection type	Terminal (2.5 mm <sup>2</sup> - 10 mm <sup>2</sup> )				
	Grid connection	Single-phase (L / N / PE)				
	Power input at night	0 W				
<b>Efficiency</b>	Max. efficiency	97.5 %		98.0 %		
	Euro efficiency	97.0 %		97.5 %		
<b>Ambient conditions</b>	Protection class	IP65				
	Ambient temperature range (for rated power output)	- 20 °C ... + 60 °C (+ 45 °C)				
	Relative humidity	0 % ... 100 % (condensation)				
	Maximum operating level above sea level	2,000 m (without derating)				
	Fire protection	according EN 62109-1/-2				
Noise emissions (1,5 m)	< 30 dB(A)					
<b>Configuration</b>	Display	LC graphics display with backlighting and status-LED				
	Inverter topology	HERIC <sup>®</sup> Transformerless				
	DC disconnect	Integrated				
	Data logger	Energy yield, peak output and operating duration of the last 31 days, 12 months, 10 years, performance curves of the last 7 days				
	Fault current monitoring	Internal, AC/DC sensitive				
	Housing / service cover	Aluminium / plastic ASA+PC				
	Overvoltage conductor, DC and AC	Requirement class D (VDE 0675-6) and/or type 3 (EN 61643-11)				
<b>Standard &amp; guidelines</b>	EMV	EN 61000-3-2 / EN 61000-3-3 / EN 61000-3-11 / EN 61000-3-12 / EN 61000-6-2 / EN 61000-6-3				
	Grid connection	VDE 0126-1-1 A1:2012 / VDE 0126-1-1 A1:2013 / VDE-AR-N 4105:2011 <sup>3)</sup> / CEI 0-21 / RD 661 / RD 1699 / G83/2				
	Device safety	EN 62109-1/-2				
<b>Interfaces</b>	Data communication	RS485 / Ethernet (Plug & Play)				
	Status signaling contact	With optional I/O module				
	Connection ripple control signal receiver					
	Connection external surge protection					
	Connection external grid monitoring					
<b>Weight &amp; Dimensions</b>	Weight	17 kg		19 kg		
	Dimensions (B x H x T)	476 mm x 360 mm x 180 mm				
<b>Warranty</b>	Standard warranty	5 years				
	Warranty extensions	To 10, 15, 20 or 25 years				

<sup>1)</sup> For AC rated power output.

<sup>2)</sup> Depending on the country setting, deviating values are possible.

<sup>3)</sup> Not for 5000P.